

WHAT IS CLAIMED IS:

- 1. rec-L-N-carbamoylase from *Arthrobacter aurescens* and mutants thereof.
- 2. An amino acid sequence of the carbamoylase according to claim 1.
- 3. The amino acid sequence of claim 2 which is SEQ ID NO:2.
- 4. A nucleotide sequence encoding the amino acid sequence according to claim 2.
- 5. The nucleotide sequence of claim 4 which is SEQ ID NO:1.
- 6. A vector comprising the nucleotide sequence according to claim 4.
- 7. A plasmid comprising the nucleotide sequence according to claim 4.
- 8. A host cell comprising the nucleotide sequence according to claim 4.

9. A method of producing L-amino acids with carbamoylases according to claim 1.

10. The method according to claim 9, wherein N-carbamoyl- or N-formyl amino acids are reacted.

11. The method according to claim 9, wherein the N-carbamoyl amino acids are produced with hydantoinases from the corresponding hydantoins.

12. The method according to claim 11, wherein the hydantoins used are constantly racemized by enzymatic or chemical methods.

13. The method according to claim 9, wherein the work is carried out in an enzyme membrane reactor.

14. The method according to claims 9, 10 or 11, wherein the enzymes used are immobilized on carriers.

15. The method according to claim 14, wherein the rec-L-N-carbamoylase is covalently immobilized on EAH-sepharose.